

Date: Wednesday, 9/12/2007 12:13:32 PM  
 User: Kim Johnston

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services		Drawing Name	: BEARING	
Job Number	: 34604				
Estimate Number	: 10089				
P.O. Number	: N/A		Part Number	: D312123	
This Issue	: 9/12/2007 S.O. No. : N/A		Drawing Number	: D3121 REV D	
Prsh Rev.	: NC		Project Number	: N/A	
First Issue	: N/A		Drawing Revision	: D	
Previous Run	: 34524		Material	: N/A	
Written By			Due Date	: 9/30/2007 Qty: 40 Um: Each	
Checked & Approved By					
Comment	: Est. A: 04.02.19 New Issue KJ/DS				

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	PG	PURCHASING 
		Comment: PURCHASING Issue P/O: 4578 Bearing as per Dwg D3121 Possible Supplier: SKF P/N: 61900-2Z or KML P/N: 6900-ZZ Material release note is required
2.0	6900ZZ	Bearing 
		Comment: Qty.: 1.0000 Each(s)/Unit Total : 40.0000 Each(s) Bearing
3.0	PACKAGING 1	PACKAGING RESOURCE #1 
		Comment: PACKAGING RESOURCE #1 Receive & Inspect for Transit Damage Ensure Material Release Note is attached
4.0	QC6	DIMENSIONAL CHECK 
		7/9/17 SP 40x Comment: DIMENSIONAL CHECK Inspect dimensions as per Dwg D3121 and attached certification Dwg Rev P 2018
5.0	PACKAGING 1	PACKAGING RESOURCE #1 
		7/9/19 (40) Comment: PACKAGING RESOURCE #1 Identify and Stock Location: 5766

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes  No  DQA:  Date: 07/09/19  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 9/12/2007 12:13:32 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BEARING

Job Number: 34604

Part Number: D312123

Job Number:



Seq. #: Machine Or Operation:

Description :

6.0 QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

2008/9

Job Completion



2009/9

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

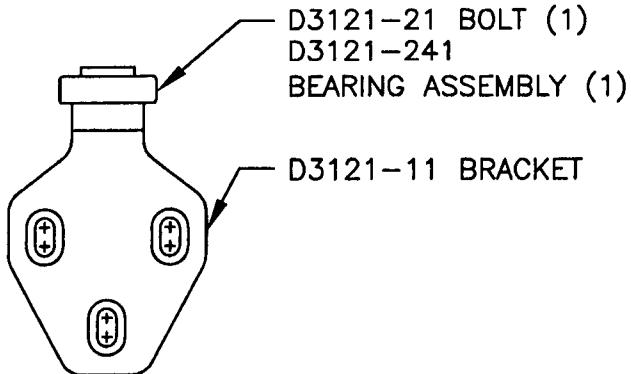
NOTE: Date & initial all entries

**DART**

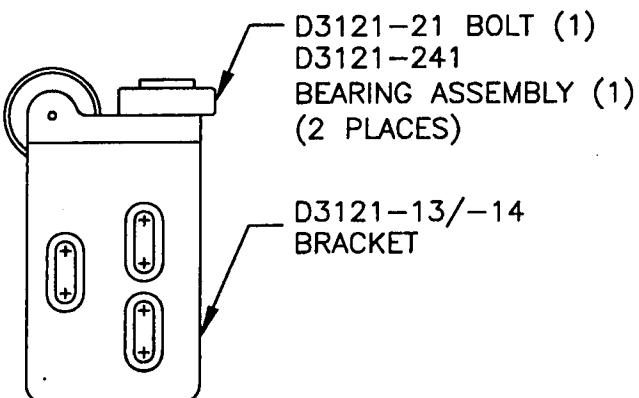
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CHECKED	APPROVED	DRAWING NO.	D3121	REV. D SHEET 1 OF 10
DATE		TITLE	BRACKET ASSEMBLY	SCALE 1:2
06.05.17				

**RELEASED**

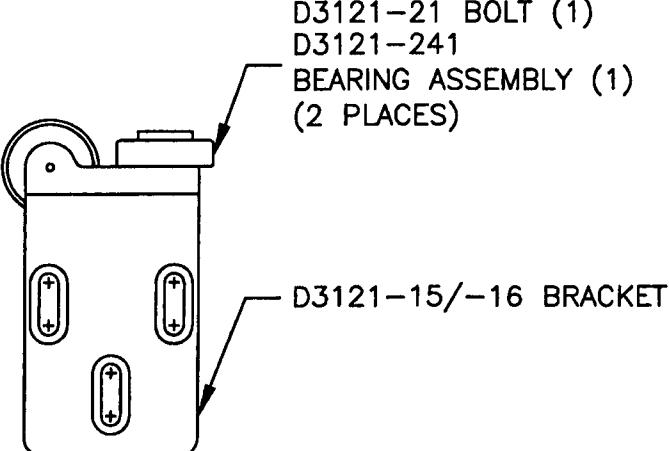
06.06.02

**D3121-041 BRACKET ASSEMBLY**

(REPLACES PREMIER P/N B30-23000-33)

**D3121-043 (SHOWN) / D3121-044 (OPPOSITE)  
BRACKET ASSEMBLY**

(REPLACES PREMIER P/N B30-23000-37/-38)

**D3121-045 (SHOWN) / D3121-046 (OPPOSITE)  
BRACKET ASSEMBLY**

(REPLACES PREMIER P/N B30-23000-35/-36)

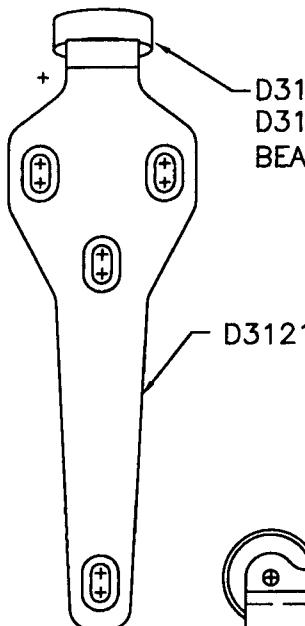
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SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 34604

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DATE		REV. D SHEET 2 OF 10 TITLE SCALE 1:2 BRACKET ASSEMBLY



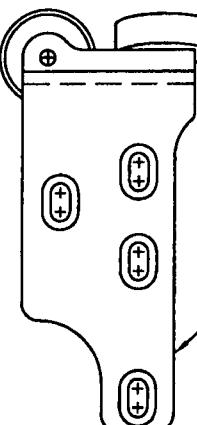
D3121-21 BOLT (1)  
D3121-241  
BEARING ASSEMBLY (1)

**D3121-141 BRACKET ASSEMBLY**  
(REPLACES PREMIER P/N B30-23001-01)

D3121-111 BRACKET

RELEASED

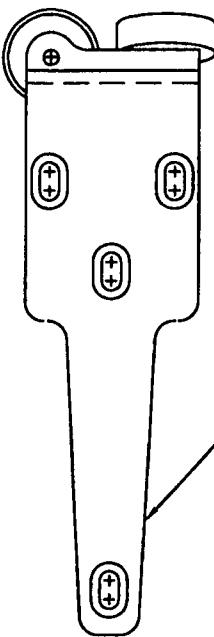
06.06.02 



D3121-21 BOLT (1)  
D3121-241 BEARING ASSEMBLY (1)  
(2 PLACES)

D3121-113/-114 BRACKET

**D3121-143 (SHOWN) / D3121-144 (OPPOSITE)  
BRACKET ASSEMBLY**  
(REPLACES PREMIER P/N B30-23000-03/-04)



D3121-21 BOLT (1)  
D3121-241 BEARING ASSEMBLY (1)  
(2 PLACES)

**D3121-145 (SHOWN) / D3121-146 (OPPOSITE)  
BRACKET ASSEMBLY**  
(REPLACES PREMIER P/N B30-23000-05/-06)

D3121-115/-116  
BRACKET

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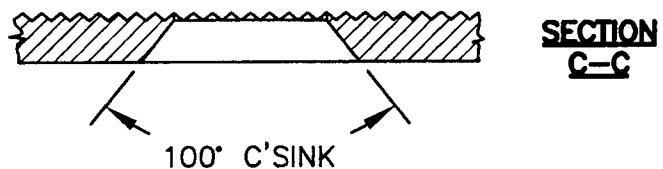
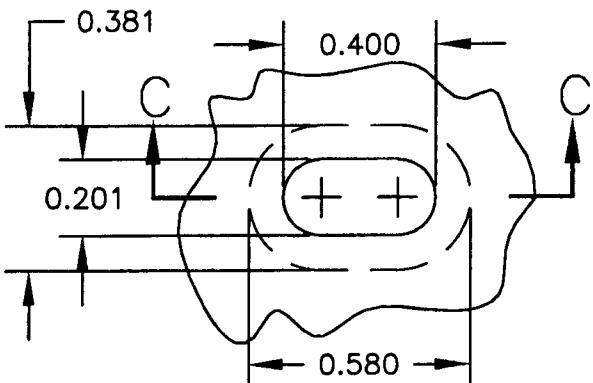
REV. D

SHEET 3 OF 10

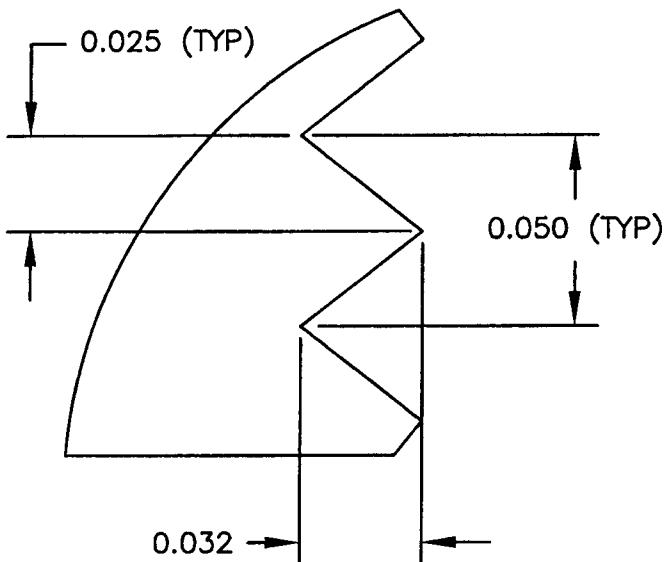
SCALE

1:1

**DETAIL A:**  
**SLOT DETAIL**  
SCALE 2:1  
VIEW ROTATED



**DETAIL B:**  
**RIDGE DETAIL**  
PARTIAL SECTION  
SCALE 1:20



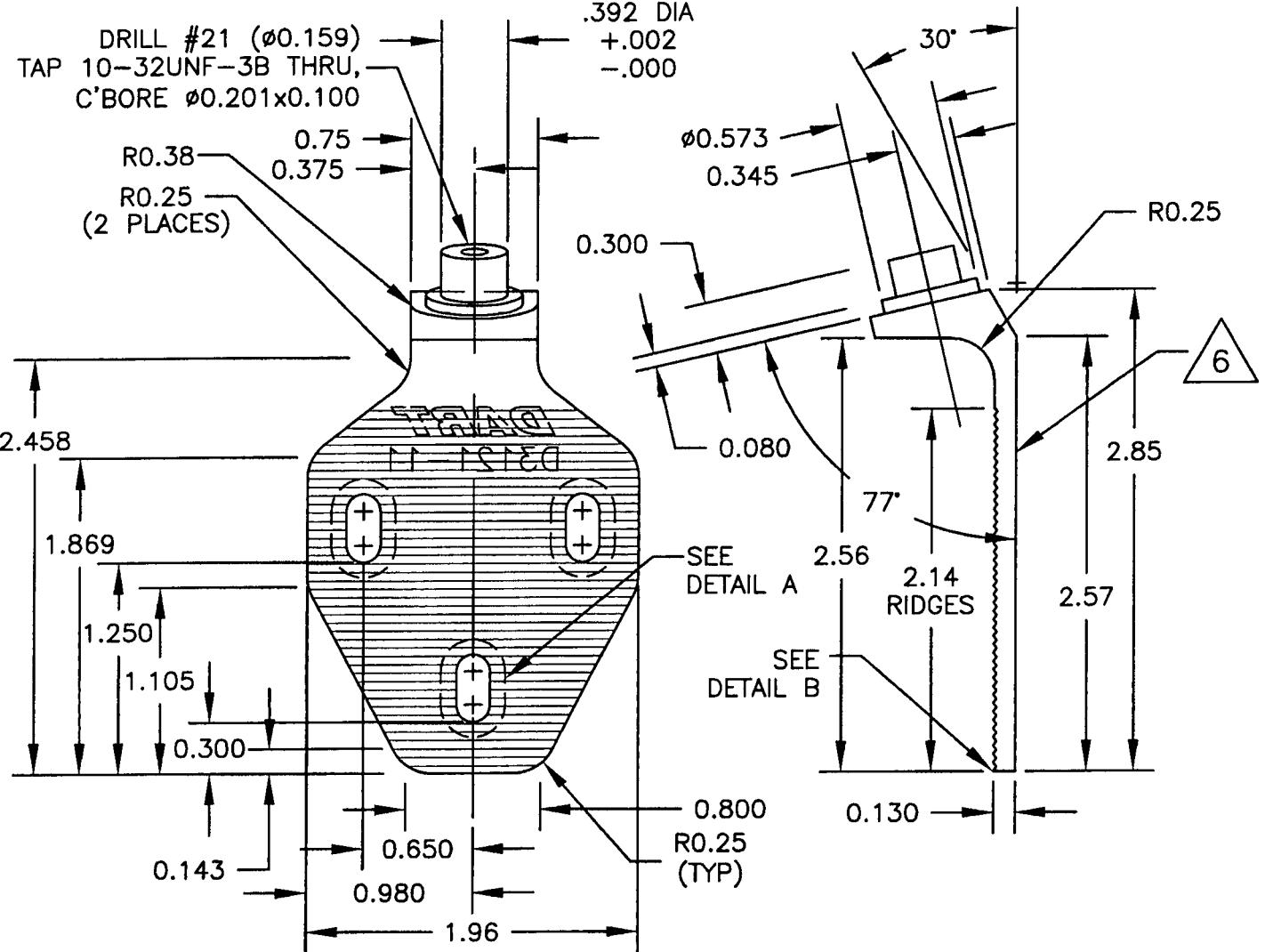
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DATE 06.05.17	TITLE BRACKET ASSEMBLY	SCALE 1:1	



D3121-11 BRACKET

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)  
MIN ULTIMATE TENSILE = 150 ksi  
MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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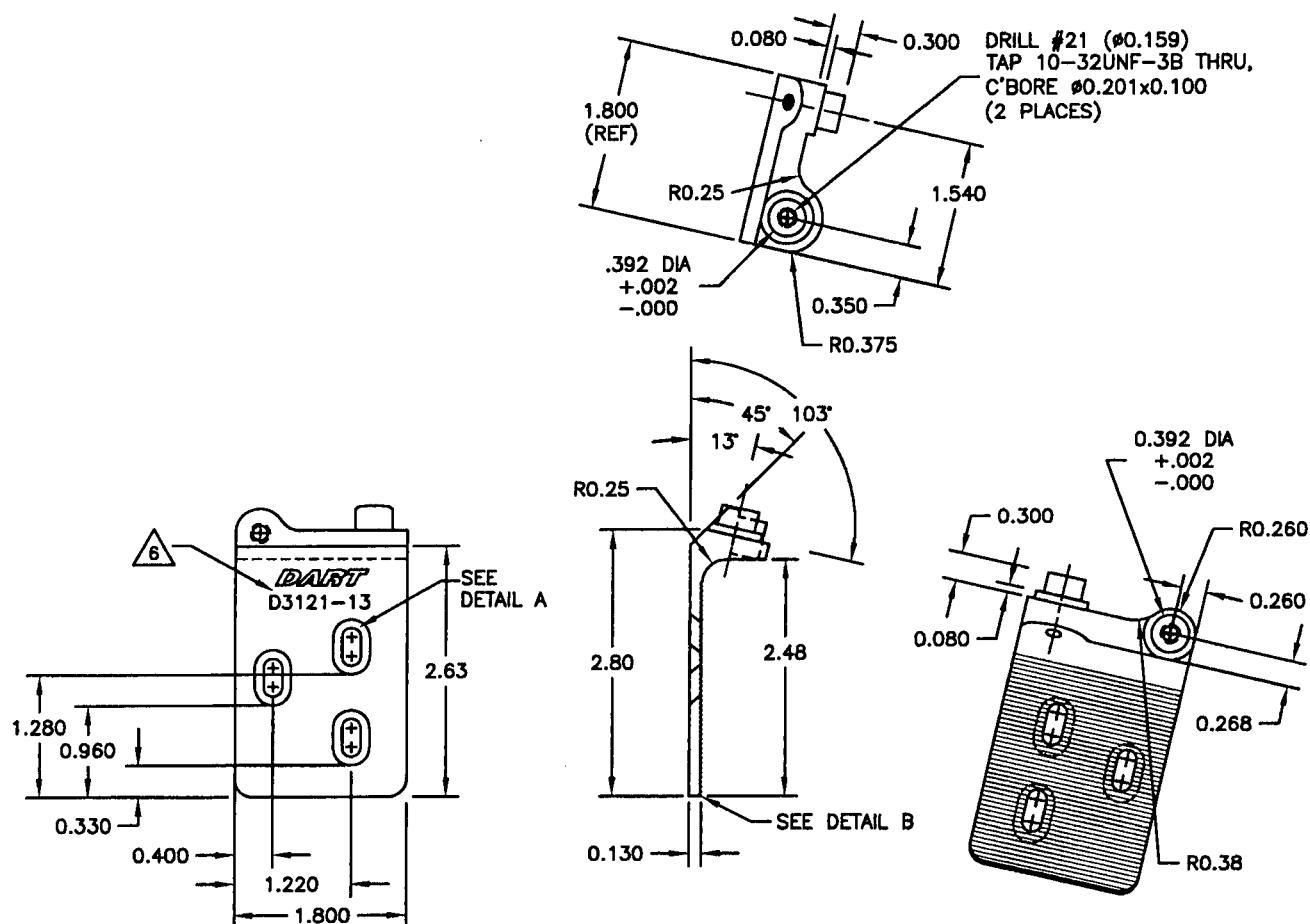
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DATE	06.05.17	TITLE	SHEET 5 OF 10 SCALE 1:2 BRACKET ASSEMBLY



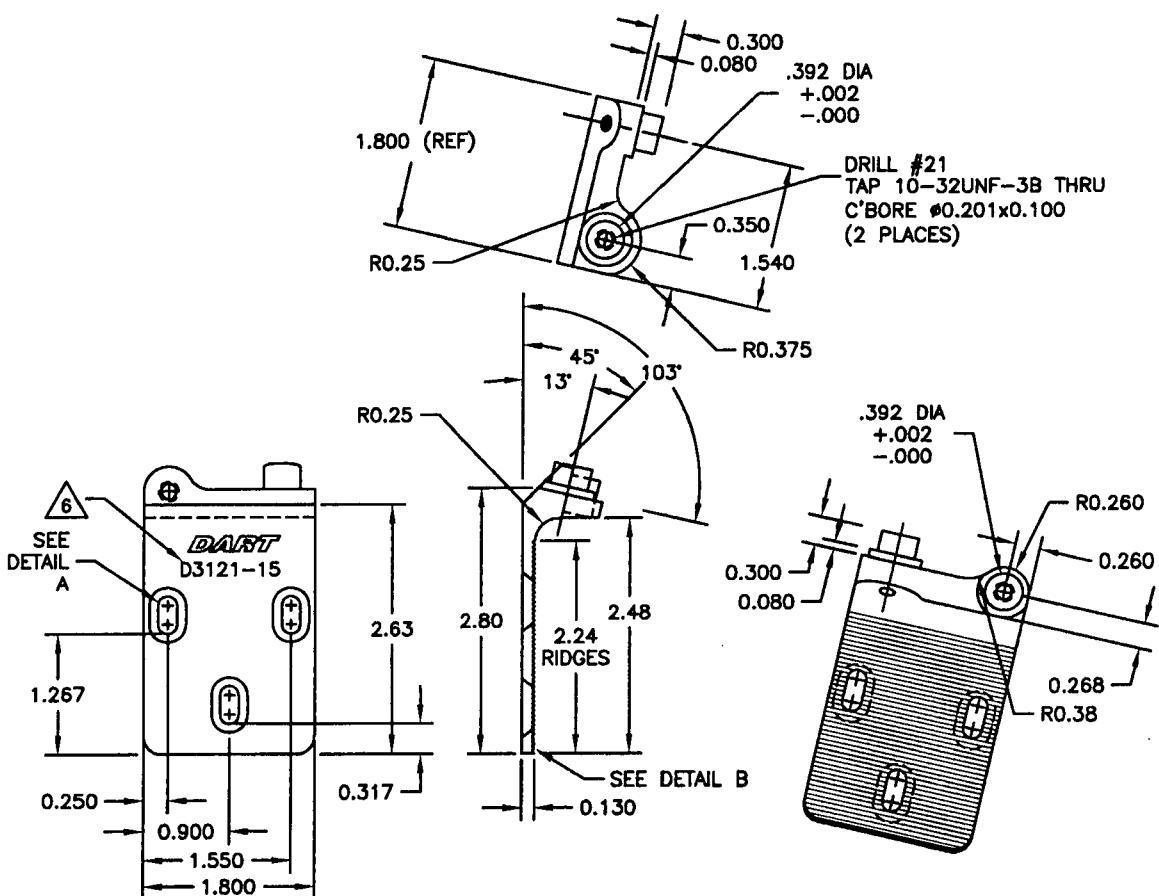
**D3121-13 BRACKET (SHOWN)  
D3121-14 BRACKET (OPPOSITE)**

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)  
MIN ULTIMATE TENSILE STRENGTH = 150 ksi  
MIN YIELD TENSILE STRENGTH = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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DATE	06.05.17	TITLE	SHEET 6 OF 10

**D3121-15 BRACKET (SHOWN)****D3121-16 BRACKET (OPPOSITE)**

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)  
MIN ULTIMATE TENSILE = 150 ksi  
MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N AND LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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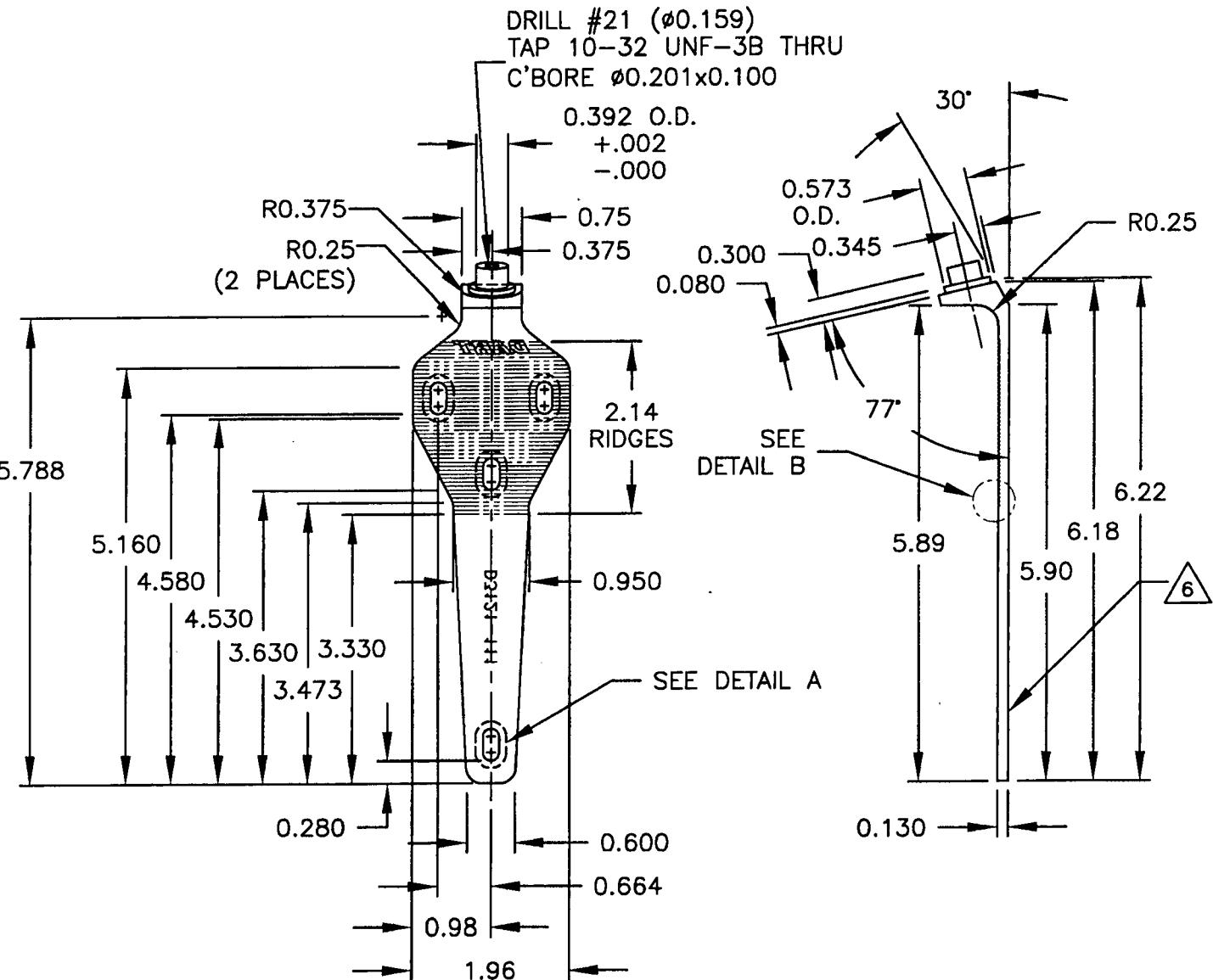
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DATE 06.05.17		TITLE BRACKET ASSEMBLY

REV. D

SHEET 7 OF 10

SCALE

1:2

**D3121-111 BRACKET**

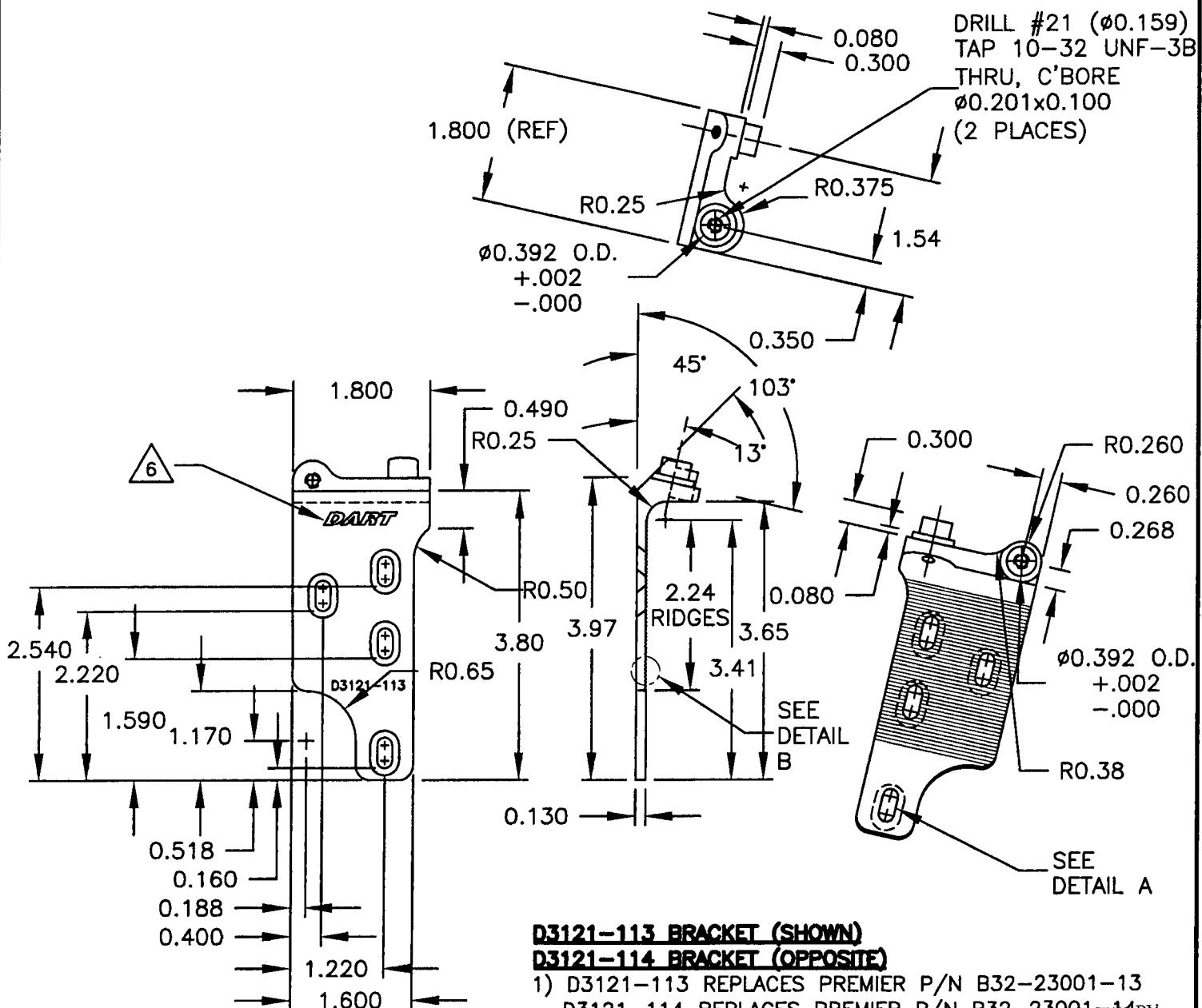
- 1) REPLACES PREMIER P/N B32-23001-11
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)  
MIN ULTIMATE TENSILE = 150 ksi  
MIN YIELD TENSILE = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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WORK ORDER  
NO 34604  
RELEASED

06.06.02

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CHECKED	APPROVED	DRAWING NO. D3121
DATE	06.05.17	TITLE BRACKET ASSEMBLY

REV. D  
SHEET 8 OF 10  
SCALE  
1:2**D3121-113 BRACKET (SHOWN)****D3121-114 BRACKET (OPPOSITE)**

- 1) D3121-113 REPLACES PREMIER P/N B32-23001-13  
D3121-114 REPLACES PREMIER P/N B32-23001-14  
SHOT COPY
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643  
RETURN TO ENGINEERING  
MIN ULTIMATE TENSILE STRENGTH = 150 ksi  
MIN YIELD TENSILE STRENGTH = 90 ksi  
UNCONTROLLED COPY  
REF DART SPEC. M17-4-B  
AMENDMENT
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS  
OTHERWISE NOTED  
NOTICE
- 4) ALL DIMENSIONS ARE IN INCHES  
WORK ORDER
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015<sup>NO.</sup>  
346004
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

**RELEASED**

06.06.02

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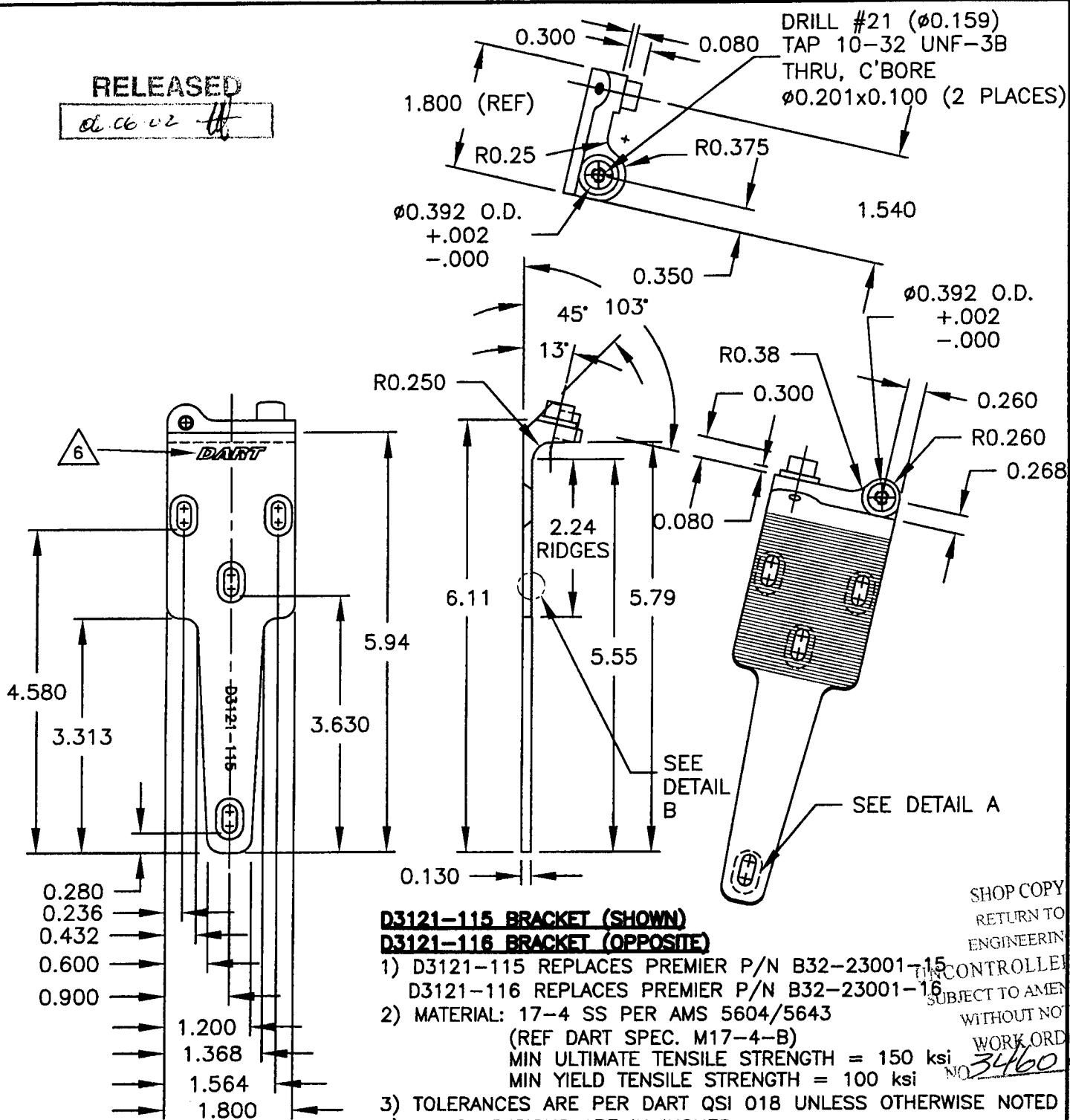
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DATE		REV. C SHEET 9 OF 10
04.02.18		TITLE SCALE BRACKET ASSEMBLY 1:2

RELEASED

06.02.18

**D3121-115 BRACKET (SHOWN)  
D3121-116 BRACKET (OPPOSITE)**

- 1) D3121-115 REPLACES PREMIER P/N B32-23001-15  
D3121-116 REPLACES PREMIER P/N B32-23001-16
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643  
(REF DART SPEC. M17-4-B)  
MIN ULTIMATE TENSILE STRENGTH = 150 ksi  
MIN YIELD TENSILE STRENGTH = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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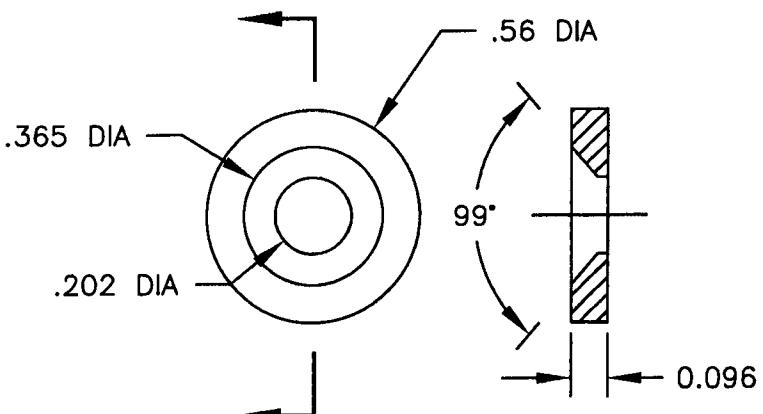
WORK ORDER  
NO 34604

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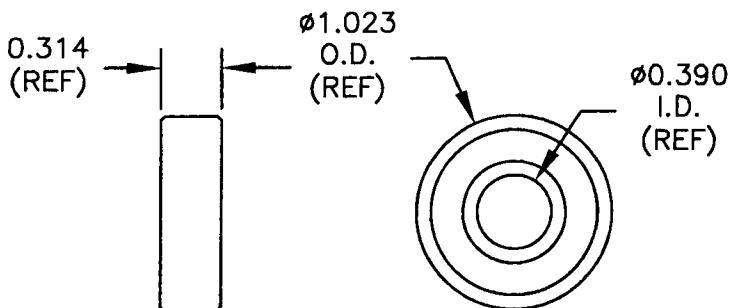
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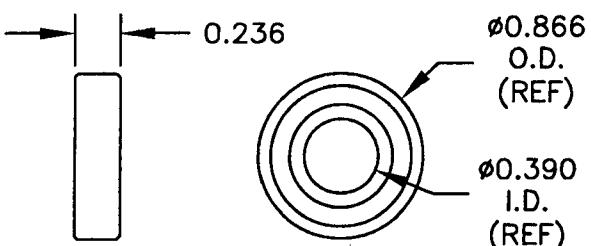
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DATE		D3121	SHEET 10 OF 10
06.05.17		TITLE	SCALE
		BRACKET ASSEMBLY	1:1

**D3121-17 WASHER (SCALE 2:1)**

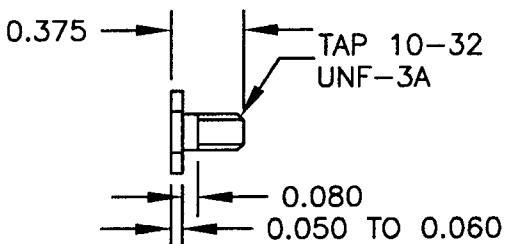
- 1) REPLACES PREMIER P/N B32-23001-17
- 2) MATERIAL: AISI 303 SS ROUND BAR, ANNEALED (REF DART SPEC. M303R)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

**D3121-19 BEARING (SCALE 1:1)**

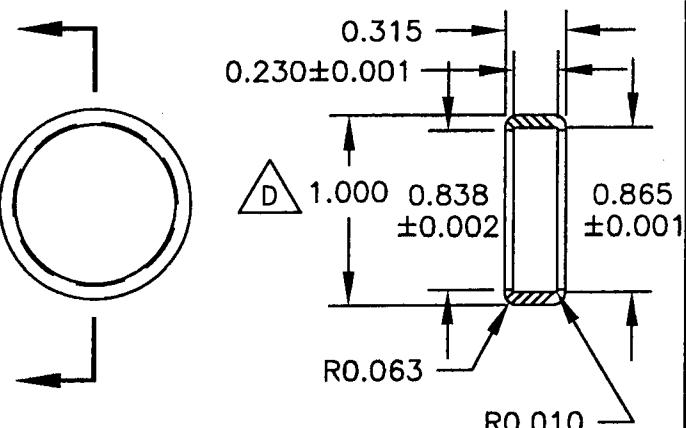
- 1) POSSIBLE SUPPLIER: KING BEARING P/N 6000-2ZJ/EM  
FAFNIR P/N 9100KDD
- 2) ALL DIMENSIONS ARE IN INCHES

**D3121-23 BEARING (SCALE 1:1)**

- 1) POSSIBLE SUPPLIER: SKF P/N 61900-2Z  
OR KML P/N 6900-2Z
- 2) ALL DIMENSIONS ARE IN INCHES

**D3121-21 BOLT (SCALE 1:1)**

- 1) MATERIAL: AISI 303 SS HEX, ANNEALED (REF DART SPEC. M303H0.500)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

**D3121-25 CAP (SCALE 1:1)**

- 1) MATERIAL: DELRIN ROD, Ø1.25 (REF DART SPEC. M-DELRIN-R1.250)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED  
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- 3) ALL DIMENSIONS ARE IN INCHES  
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WORK ORDER  
NO. 34604  
D3121-23  
BEARING

RELEASED  
06-06-02**D3121-241 BEARING ASSEMBLY (SCALE 1:1)**

**DART****Purchase Order**

Date Sep 13, 2007	Page 1
Purchase Order Number PO00004578	

Dart Aerospace Ltd  
1270 Aberdeen St  
Hawksbury, Ontario K6A 1K7  
Phone: (613)632-9577  
Fax: (613)632-1053

**FAXED****Vendor Address:**

General Bearing Service  
386 Main Street  
Hawkesbury, ON K6A 1A5  
Phone (613) 632-9914  
Fax (613) 632-2751

**Ship To:**  
Main Finished Goods Location  
Dart Aerospace Ltd  
1270 Aberdeen St  
Hawksbury, Ontario K6A 1K7

Reference	Contact	Vendor Number VC-GEN001	PO Date Sep 13, 2007	Terms N30	Ship Via	Expected Arrival Sep 18, 2007
7/9/17 SO						

Qty. Ordered	Item Number	Description	Expected Arrival	Drop Ship	Unit Cost	UOM	Extended Price
40.0000	6900ZZ	Bearing Comments: PER DRWG D3121 REV.D SKF P/N 61900-2Z OR KML P/N 6900-ZZ	18/09/2007	No	4.970000	Each	198.80

**CERTIFICATE OF CONFORMITY**  
**REQ'D UPON DELIVERY**

Comments:	Tax Summary: GST GSTME GSTND	11.93 0.00 0.00	Less: included tax	0.00
			Subtotal	198.80
			Total tax	11.93
			Total purchase order in CAD Dollars	210.73

Entered By: ELACELLE

Approved By:

GENERAL BEARING SERVICE • INC.

GET # R101979094

SOLD TO: DART AEROSPACE LTD.  
1270, ABERDEEN STREET  
HAWKESBURY, ON.

K6A-1K7

SALE MADE BY: DR  
SHIP VIA: DICOM H29996595

CUSTOMER ORDER #: P080004578

ORDER DATE: SEP 14, 2007

PST LICENCE: 6122-5207

PRODUCT	DESCRIPTION	QTY	SHIP QTY	PRICE	EXTENSION
6900-2Z	BALL BEARING	40	40	4.97	198.80
				G.S.T.	11.93

PACKING SLIP NO: 463463-0

RECEIVED BY:

1282605

CERTIFICATE OF CONFORMITY  
REQ'D UPON DELIVERY

THIS FORM MUST BE COMPUTER PRINTED TO BE VALID. S. & O.E.

DOIT ÊTRE IMPRIMÉ PAR ORDINATEUR POUR ÊTRE VALIDE. S. & O.E.